

United States Environmental Protection Agency Washington, DC 20460

Notice of Arrival of Pesticides and Devices

Send Completed Form to Appropriate Regional Office Listed in the Instructions for this Form.

OMB Control No. 2070-0020 Approval Expires 11/30/2016

Note: Read Instructions before completing form.

Note: Read instructions before cor					
Part I	To Be Co	mpleted by Importer of	Record or Licensed Custo	ms Broker	
1. Name and Complete Address of	Licensed Cus	toms Broker	2. Name and Complete Address of	of Importer of Record	
849 Thomas Drive			Nufarm Americas Inc. 11901 South Austin Avenue Alsip, IL 60803 T:708-377-1330		
▼ Return Form to this Addres	S	4444	Return Form to this Address		
Name and Complete Address (EPA Registration Number	5. EPA Producer Establishment No.	
			35935-46	83807-CHN-001	
Sichuan Leshan Fuhua	longda	Agro Unemical	6. Brand Name of Product		
Tech Co. Ltd. Qiaogou Road Wutoni Leshan City, Sichuan,			GLYPHOSATE ACID	TECHNICAL	
7. Active Ingredients and Percent	age of Each				
N-(phosphonor	nethyl)	glycine 95%			
8. Unit Size 9. Qua	ntity	10. Total Net Weight	11. Country of Origin		
1,000 KG 36	0	360,000 Kgs	China		
12. Port of Entry		<u> </u>	13. Name and Complete Addres	ss of Carrier	
Chicago, Illino	ois		Hanjin London		
14. Entry Number					
231-8001253-0	1/27/1	14			
17. Location of Goods for Examination after Importation Chicago, IL			16. I assert that information constituting Confidential Business Information is shown in the above blocks numbered: (Note: Blocks 4, 5, 6, 7 are not entitled to CBI treatment—see Instructions)		
18. To be Completed for Pesticic of Arrival. Check all that apply ar	es without an d provide add	EPA Registration Number (Titional information as indicate	he following information is optional d)	I, but may expedite processing of the Notice	
				: Producer Establishment Number:	
☐ 18c. A pesticide distributed☐ 18d. A pesticide distributed☐ 18e. A pesticide transferred☐ 18f. A pesticide distributed☐ 18d. A pesticide transferred☐ 18d	PA Registration under an Expension for research at solely for expension for expension for the purpose	on Number of Product being F crimental Use Permit. Experin nd development purposes wit ort. Domestic Producer Estab gency exemption. Emergenc ses of disposal.	ormulated; if applicable: nental Use Permit Number: thout an Experimental Use Permit. dishment Number: y Exemption Number:	estic Producer Establishment Number	

19. Remarks (Provide additional information here. It is recommended that a copy of the label affixed to the product be submitted with the NOA.).							
•							
Certification Learning that the statements I have made on this form and all attachments thereto are true, accurate and complete. Lacknowledge that any							
I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law							
20. Printed Name of Importer of Record or	Telephone Number	21. Signature of Importer of Record or License Customs Broker	d Date Signed				
Licensed Customs Broker Susan Wright	708-377-1363	Swan West	1/17/14				
Susan vvngnt		Down Was 4	1 1 1 1 1 7				
Part II: To	Be Completed by U.S.	Environmental Protection Agency					
Action to be taken by U.S. Customs and Border	Protection						
Release Shipment	Detain for Inspection	Release shipment to consignee ur be held intact pending inspection.	nder bond. Shipment must				
Other (Specify)							
Remarks							
ENT RY No. 231-800125	3-0						
Signature and Title of EPA Official			Date				
Of City In	DM-MM	+ My	1/21/14				
Part III: To Be Completed by U.S. Customs and Border Protection							
The information shown in Part I was compared with the entry papers for this shipment and no discrepancies were noted. The shipment was handled as instructed by EPA in Part II. Any deviations should be brought to the attention of EPA before releasing shipment and should also be noted in "Remarks."							
Remarks							
Signature of District Director of Customs	Date						
		ad the instructions and complete this form					
comments regarding the burden estimate or any other aspect of this collection of information to: Director, Collection Strategies Division, Office of Environmental Information (OEI), U.S. Environmental Protection Agency (Mail Code 2822), 1200 Pennsylvania							
Avenue, NW, Washington, DC 20460. Include OMB number 2070-0020 in any correspondence.							

GLYPHOSATE TECHNICAL FOR MANUFACTURING USE ONLY

EPA Est. No. 83807-CHN-00	EPA Reg, No. 35935-46
TOTAL:100.0%	
OTHER INGREDIENTS: 5.03	OTHER INGREDIENTS:
N-(phosphonomethy))glycine95.0%	N-(phosphonomethyl)glycine
	ACTIVE INGREDIENT:

KEEP OUT OF REACH OF CHILDREN DANGER

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)
SEE BELOW FOR FIRST AID AND ADDITIONAL PRECAUTIONARY
STATEMENTS

For Medical Emergencies Only, Call (877) 325-1840 For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

HAZARDS TO HUMANS AND DOMESTIC ANIMALS PRECAUTIONARY STATEMENTS

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF INHALED. Do not get in eyes or on clothing, Avoid breatining dust. Wear goggles or face shield. Weah thoroughly with soap and water after handling and before setting, drinking, chewing gurn, or using tobacco. Remove contaminated clothing and wash before reuse.

HOT LINE NUMBER		
possume. Call a poison control center or doctor for further treatment advice.	•	
If person is not breathing, can a river an amendance, went give artificial respiration, preferably by mouth-to-mouth, if		
Move person to fresh air.	٠	IF INHALED
Do not give anything by mouth to an unconscious person.	•	
control center or doctor.		
Do not induce vomiting unless told to do so by the poison	•	
Have person sip a glass of water if able to swallow	٠	
treatment advice.		
Call a poison centrol center or doctor immediately for	٠	IF SWALLOWED
Call a poison control center or doctor for treatment advice	٠	
then continue rinsing eye.		
Remove contact lenses, if present, after the first 5 minutes,	•	
to 20 minutes.		
Hold eye open and rinse slowly and gently with water for 15	•	IF IN EYES
FIRST AID		

Have the product container or label with you when calling a poison control cellier or doctor, or going for treatment.

You may also contact 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage

ENVIRONMENTAL HAZARDS

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless this product is specifically identified and addressed in an National Pollutant Discharge Elimination System (NPDES) permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARDS

aluminum, fiberglass, plastic and plastic-lined containers. Solutions of this product should be mixed and stored using only stainless steel

DO NOT MIX, STORE OR UTILIZE THIS PRODUCT OR SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS

such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with labeling. Read the entire label before using this product.

carambola (staffull) chapt, charlowya; cocontr, crifler, contr., cotton; cramber, cramber, cramber, cramber, cramber, cramber, cramber, cramber, cramber, carambola (staffull) chapt, charlowya; cocontr, crifler, contr., cotton; cotton; cramber custand apple; dates; dokudami; durian; epazote; feljoa; figs; fias; glaba; globe andichoke; Governor's plum; gow kee; grapes; (raisin, table, whel); guava; hops; ilama; inthe; imbu; jabolicaba; jackfruit; joloba; juneberry; kava; kenaf; kwi; jasqueralla; inthe; interes, lingonberry; forigan; lychee; maney apple; mango; mangosteen; elucaena; lingonberry; forigan; lychee; maney apple; mango; mangosteen; marmadadebox (gentip); meadowfoan; molga; mountain papaya; mustard; noni (Indian mulberry); okra; olive; oregano; pain; papaya; passionfutuli pasture grasses; pawpaw; peanut; papper leaf; peapermint; pelial; persimmon; pine rut; pineapple; pistachic; piantain, pomegranate; pulasan; quinoa; rambutan; apa; rose apple; sufflower; salai; piantain, pomegranate; pulasan; quinoa; rambutan; apa; rose apple; sufflower; salai; sapole (flack; manay, white); sesame; sorghum (milo); soursop; soybean; sapole (flack; manay, white); sesame; sorghum (milo); soursop; soybean; sapole (flack; manay, white); sesame; sorghum (milo); soursop; soybean; spantain; sundipersiman; Use only for the manufacturing or formulating of, or repeataging as, an herbicide for use in the following crops: Crop Groups 1, 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20, acerola-allox were, ambarelia, saparaejus; asiennoya; avocado; bambor; barnara; beteinut; briba, blimbe; breadruit; butfalo gount; cacao (cocos) bean; cactus; cantistal; canola; spinach; watercress; wax jambu; yacon.

For use in the following glyphosate-tolerant crops: Roundup Ready Atfalfa; Roundup Ready Canola (Spring Varieties); Roundup Ready Canola (Winter Varieties); Roundup Ready Corn; Roundup Ready Corn; Roundup Ready Cotton; Roundup Ready Cotton; Roundup Ready Flex Cotton; Roundup Ready Cotton; Roundup Ready Sugarbeet; Roundup Ready Sweet Corn; Sweet Corn Hybrids with Roundup Ready Sugarbeet; Roundup Ready Sweet Corn; Sweet Corn Hybrids with Roundup Ready 2 Tachnology.

For the following uses: bermudagrass release, broadcast and spot weed control, chemical mowing; cut stump application; hollow stem injection; ridetion and frill; trim-and-edge; turigrass renovation, site preparation; and other uses in, on or around the following sites: affields; airports; alleys, lanes, trails; & access roads; apartment following sites; around ram and ranch structures and outbilldings; around ommental sites; commercial sites; commercial sites; commercial sites; contrained and around farm and ranch; structures and outbilldings; around ommental sites; commercial sites; construction sites; CPP land; ditch banks; doman turigrass; driven theaters; driveways; construction sites; CPP land; ditch banks; doman turigrass; driven theaters; driveways; construction sites; CPP land; ditch banks; doman turigrass; driven theaters; driveways; construction sites; construction sites; prosent, process; landsstal areas; landsstal plants; restoration & management areas; finebreaks; forestly, golf & ramps; driven process; houseful areas; landscape areas; habita restoration & management areas; natural areas; non-food tree, sinub, while, and commental sparks; production sites; nurscries; pastures; paths and trails; shintb, wine, and commentals production sites; nurscries; pastures; paths and trails; shintb, wine, and commental sparks; production sites; nurscries; pastures; perplant to turf & public areas; refinefes; residential sites; resonts; rights-of-way, readsides; schoods; pibeline, power, telephone & utility rights-of-way, production; tennis counts; turif areas; paths; production; utility sites; uncorposed farmstead areas; uncultivated non-agricultural areas; vacant lots; valloways; wastelands; wicilife food plots; wildfile habital account valles. areas; woody brush and trees; and other related sites.

This product may be used to formulate products for any additional uses not listed on this label. If the formulator, user group, or grower has complied with \cup S. EPA data submission requirements regarding the support of such use(s).

This product may be formulated for products to be used for experimental purposes that are in compliance with FIFRA.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Keep container closed to prevent spills and contamination.

PESTICIDE DISPOSAL: Wastes of this product may cause irreversible eye damage and may be dangerous. Improper disposal or excess pestided or rinsate is a violation of may be dangerous. Improper disposal of excess pestided or finate is a violation of rederal law. If these wastes cannot be disposed of by use according to the label instructions, contact your State Pestided or Environmental Control Agency, or the Inszardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING AND DISPOSAL: (This product is available in multiple containers. Follow the container disposal instructions below that apply to your container

Nonrefiliable Containers Without Outer Bag: Nonrefiliable container, Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning in a sanitary landfill or by incineration if allowed by state and local authorities, by burning.

this container. Completely empty liner by shaking and tapping sides and bottom to loose chiqqing particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incheration if allowed by state and local authorities, by burning. If burned stay out of smoke. Offer the outer bag for recycling, if available. Nonrefillable Containers With Outer Bag: Nonrefillable container. Do not reuse or refil

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GLARANTIES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS, OR REPRESENTATION, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT FOILD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, PRODUCT FOR A PARTICULAR TRADE USAGE. UNIVERSUED CONSEQUENCES, FOR ANY PARTICULAR TRADE USAGE. UNIVERSUED CONSEQUENCES, OR INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF INCLUDING SAS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANUER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF AMOUNTACITURER OR SELLER AND ASSUMED BY BUYER OR USER, THIS WRITING MANUFACTURER AND SELLER, AND NO PERSON OR AGAIN OF REPRESENTATION OR WEATHER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

IMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTIAL, OR CONSECULENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF CONSECULENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PRIVALITIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, PENALTIES RELATING TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF BY WAY OF INDEMNIFICATION OF BY REASON OF, OR RISING OUT OF THE WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE WHATSOEVER, RESULTING FROM AND LAW ALL SUCH RISKS SHALL BE EXTENT CONSISTENT WITH APPLICABLE LAW, ALL SUCH RISKS SHALL BE EXTENT CONSISTENT WITH APPLICABLE LAW, ALL SUCH RISKS SHALL BE EXEMPLED BY THE BUYER, USER, OR TITS OUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USERS SOLUSIVE REMEDY. AND MANUFACTURERS OR SELLER TO STALLBELTY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV091713)

MADE IN CHINA

NET WEIGHT: 2204.6 LB (1000 KG)

Morrisville, NC 27560 NUFARM LIMITED 4020 Aerial Center Parkway, Manufactured For





For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC Day or Night: 1-800-424-9300. For Medical Emergencies Only, Call 1-877-325-1840.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:

Glyphosate Technical NUP-07163

Synonyms:

Glyphosate; N-(phosphonomethyl) glycine

EPA Reg. No.:

35935-46

Company Name:

Nufarm Limited

4020 Aerial Center Parkway Morrsiville, NC 27560

Date of Issue: Sections Revised: December 11, 2013

Supersedes: October 21, 2011

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance and Odor: White solid with slight odor.

Warning Statements: Keep out of reach of children. DANGER. CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF INHALED. Do not get in eyes or on clothing. Avoid breathing dust. Wear goggles or face shield. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

Potential Health Effects:

Likely Routes of Exposure: Eye and skin contact.

Eye Contact: Causes substantial but temporary eye injury.

Skin Contact: Slightly toxic based on toxicity studies.

Ingestion: Slightly toxic based on toxicity studies. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed.

Inhalation: Low inhalation toxicity. Inhalation of dusts may cause coughing and sneezing.

Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects: Available data on similar formulations suggest that this product would be slightly to moderately toxic to aquatic organisms and practically non-toxic to avian species, honeybees and earthworms.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT

CAS NO.

% BY WEIGHT

N-(phosphonomethyl) glycine Other Ingredients

1071-83-6

95.0

5.0

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If on Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable

Autoignition Temperature: Not applicable

Flammability Limits: Not applicable

Extinguishing Media: In case of fire, use water (flood with water), dry chemical, carbon dioxide, or alcohol foam.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later. This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as oxides of carbon, nitrogen, and phosphorous.

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 2 Flammability: 0 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Wash area with strong industrial detergent and water, absorb and sweep into container for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Handling:

Do not get in eyes or on clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Solutions of this product should be mixed and stored using only stainless steel, aluminum, fiberglass, plastic or plastic-lined containers. DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Storage:

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Keep container closed to prevent spills and contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear face shield, goggles or safety glasses with front, brow and temple protection. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides. General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco.

Exposure Guidelines:

applying cosmetics or using the toilet.

		SHA	ACGIH			
Component	TWA	STEL	TWA	STEL	Unit	
Glyphosate	NE	NE	NE	NE		

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White solid with slight odor.

Boiling Point:

Decomposes @ 200°C

1.66 g/cc

Solubility in Water: Specific Gravity:

Soluble

Density:

Not determined Not applicable

Evaporation Rate:

Not applicable

Vapor Density:

Freezing Point:

Not applicable

Vapor Pressure:

Not applicable

pH:

2.14 (1% solution)

Viscosity:

Not applicable

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Strong oxidizing agents: bases and acids. This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Hazardous Decomposition Products: Under fire conditions, may produce gases such as oxides of carbon, nitrogen, and phosphorous.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological Data for Glyphosate Technical

Data from laboratory studies conducted on a similar, but not identical, formulation:

Oral: Rat LD₅₀: >5,000 mg/kg

Dermal: Rabbit LD₅₀: >5,000 mg/kg

Eye Irritation: Rabbit: Moderately to severely irritating.

Skin Irritation: Rabbit: Non-irritating

Subchronic (Target Organ) Effects: Repeated overexposure to glyphosate may decrease body weight

gains and effects to liver.

Carcinogenicity / Chronic Health Effects: Prolonged overexposure to glyphosate may cause effects to the liver. There was no evidence of carcinogenicity in animal studies using glyphosate. EPA has given glyphosate a Group E classification (evidence of non-carcinogenicity in humans).

Reproductive Toxicity: In laboratory animal studies with glyphosate, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Developmental Toxicity: In animal studies, glyphosate did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother.

Genotoxicity: Glyphosate has produced no genetic changes in a variety of standard in vitro (bacterial cells) and in vivo tests using animals.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Data on Glyphosate Technical:

96-hour LC₅₀ Bluegill:

120 mg/l

Bobwhite Quail 8-day Dietary LC₅₀:

>4.500 ppm

96-hour LC₅₀ Rainbow Trout: 48-hour LC₅₀ Daphnia:

86 mg/l

Mallard Duck 8-day Dietary LC₅₀:

>4,500 ppm

-- ,

780 mg/l

Environmental Fate:

In the environment glyphosate adsorbs strongly to soil and is expected to be immobile in soil. Glyphosate is readily degraded by soil microbes to AMPA (aminomethyl phosphonic acid) that is further degraded to carbon dioxide. Glyphosate and AMPA are unlikely to enter ground water due to their strong adsorptive characteristics. Terrestrially-applied glyphosate has the potential to move into surface waters through soil erosion because it may be adsorbed to soil particles suspended in the runoff. Aquatic applications registered for certain formulations may also result in glyphosate entering surface waters. Complete degradation is slow, but dissipation in water is rapid because glyphosate is bound in sediments and has low biological availability to aquatic organisms. These characteristics suggest a low potential for bioconcentration in aquatic organisms and this has been verified by laboratory investigations of glyphosate bioconcentration in numerous marine and freshwater organisms with and without soil. The maximum whole body bioconcentration factors for fish were observed to be less than 1X. Bioconcentration factors for sediment dwelling mollusks and crayfish tended to be slightly higher, but were always less than 10X. In addition, any residues accumulated in organisms were rapidly eliminated.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with application Federal, state or local procedures.

Container Handling and Disposal:

Nonrefillable Containers Without Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke.

Nonrefillable Containers With Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke. Offer the outer bag for recycling, if available.

Refillable Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with pump 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. An empty container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Completely empty package into formulation equipment. This package may be returned for refilling with this product. If not refilled, dispose of empty package in a sanitary landfill or by incineration as applicable.

14. TRANSPORTATION INFORMATION

DOT: Not Regulated

IMDG: Not Regulated

IATA: Not Regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370): Immediate

Section 313 Toxic Chemical(s): None

Reportable Quantity (RQ) under U.S. CERCLA: None

RCRA Waste Code: None

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not listed

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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